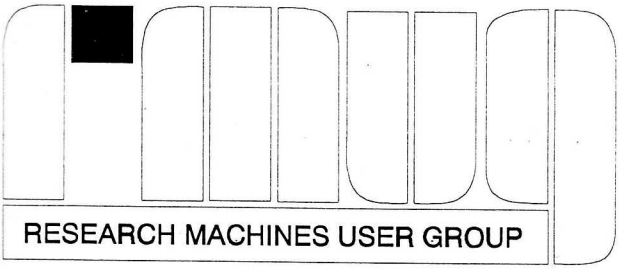
RM User

Volume 9:4
December 1994



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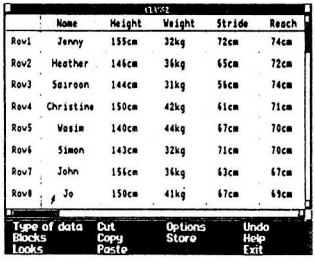

	Name	Height	Weight	Stride	Reach
Row1	Jenny	155cm	32kg	72cm	74cm
Row2	Heather	146cm	36kg	65cm	72cm
Row3	Sairoon	144cm	31kg	56cm	74cm
Row4	Christine	150cm	42kg	61cm	71cm
Row5	Wasim	140cm	44kg	67cm	70cm
Row6	Simon	143cm	32kg	71cm	70cm
Row7	John	156cm	36kg	63cm	67cm
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Type of data Cut Options Undo
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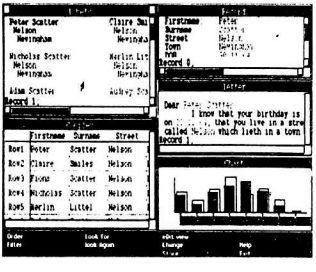

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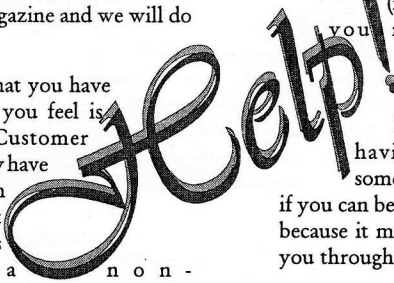
HelpLine

The User Group exists to help its members use the computers which they have.

The magazine is the main way in which we communicate with our members. If you find that it's not covering the areas you want to know about then phone someone listed at the back and let them know what you would like to see; the chances are that you won't be the only person who has the same needs.

Many of you (about 20%) are home users of Nimbus computers and we would like to help you. Do please phone any of the people whose numbers are listed at the back of the magazine and we will do our best to help.



You may find that you have a problem which you feel is too trivial for Customer Support or you may have a problem with which they can't help, perhaps because you have a non-standard setup for your equipment or you are using third-party equipment. This is the time when we may be able to help.

Remember that you can telephone the User Group members in the evening or at weekends when RM is shut (and, of course, you are just bound to hit problems). Also, RM don't claim to have great knowledge of products which they don't produce such as Excel or PageMaker. They can tell you how to install the packages on their equipment and how to get started but they cannot be expected to give you in depth support on using the packages. We, on the other hand, can. Most of the people whose phone numbers are listed at the back are using a range of software which is probably the same as yours on a daily basis. We may have met exactly the problem you have just encountered.

If you are in difficulty, please ring anybody on the Committee (numbers at the back) and you may also phone Tim Phillips on 0284 706623 (home number).

It is a great help if you are having a problem doing something using your computer if you can be next to it when you phone because it may then be possible to talk you through a solution over the phone.

If your problem is not urgent, or you think it may be difficult to explain over the phone, then do please write to the Editor with your query. I will either reply to you directly or pass your query on to a better person to solve it or publish your letter in the next magazine as a request for help.

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Deadlines for the next issues

RM User 9:5 ..... 16 January 1995
RM User 9:6 ..... 6 March 1995

The date shown above is the *latest* date for copy for the magazine. You will normally receive the magazine about 2-3 weeks after the date shown.

Missing a Magazine?

Back issues of the magazine are available from the editor - please write for more details.

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News and Editorial

The 1994 Training Weekend which took place at the end of October was a great success. We had more delegates than ever before, overflowing the Novotel and using accommodation in the adjacent Sleep-Inn. Many thanks to all those who attended for making it such a rewarding time and especially to Research Machines who, yet again, put in an enormous amount of effort to help us. All the committee members contributed to making the weekend happen but without Maureen Wernham it just wouldn't have taken place so I'd like to thank her publicly for all her work.

We are already starting to make plans for the 1995 weekend; if you couldn't make it this year because your school had committed the budget before you knew about the weekend then it's worth putting in a bid now. We will be back at the Novotel in Nottingham; the hotel facilities were very good and the staff proved to be very helpful. We know that many people had a hard journey getting there it's probably true that travel to anywhere on a Friday evening will be difficult for many people. We are hoping to keep to about the same cost as this year; our target is to have a cost for the weekend of £250. It is a lot of money but if you compare it with the sort of training courses that are advertised by commercial companies you'll find that it's good value for money.

One of the decisions the committee made at a recent meeting was to try to organise some one day training sessions at venues around the country. The first of these will be hosted by Ackworth School on Saturday 18 February. There are some more details of this on page 12 and full details will reach you early in the new year.

If you've ever wanted to own shares in Research Machines then your chance is coming soon. RM plc will be floated on the stock market in the near future. The company is valued in excess of 50 million pounds and is in a strong position because the *de facto* standard in educational computing is the PC compatible. I've said before that it's good to see RM being a successful company - many schools have huge investments in their products and it's important to have RM around to support them.

RM have been working with networks in education for about 12 years and were putting sophisticated networks into schools when most offices just had standalone computers. They continue to look at the ways in which networks can develop to help schools and one of the talks at the AGM on 18 March will concern RM's view of the future of networks in schools. I don't have a crystal ball so I can't predict what will happen but at the moment the two obvious choices for the future are staying with Microsoft and moving from Lan Manager to Windows NT Server or going over to Novell with Netware. Novell have something like 80% of the network market in industry but until recently didn't have a product that suited the education way of working (where very few users have their "own" computer and machines are constantly being restarted as pupils move around). Netware version 4 looks more suitable for this but I don't know how easy it would be to have a network with perhaps 1 server running Lan Manager and another running Netware.

AutoCad is generally acknowledged as being the market leader in CAD software but it's out of the price reach of most people. AutoSketch is a much simpler

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Windows program but even this is expensive if you are buying a class set. Force 2 International are UK distributors for both products and are having a clearance sale. If you want to buy CAD products at very low prices then contact them on 01564 792324 for more details.

I reviewed Question Mark Designer earlier this year and was pleased with it. Question Mark have now launched version 2 which adds the facility to use rich text. This means that questions can use more than 1 font and can include bold or italic. You can also use sub and superscript characters, making it much easier to include chemical formulae or maths equations (which previously had to be shown as pictures). Details from Question Mark on 0171 284 3999.

This is my last issue as Editor. I took over from Robin Davies in 1990 and have produced 26 issues. I've been pleased with most of them and I hope that you feel the same. It's been great fun doing most of the work and I've learnt an awful lot, both about computers and the problems people have with them and also about using desktop publishing software from Aldus PageMaker from version 3 through to version 5. I cringe when I look back at some of my early efforts, especially the first few covers (if you don't have them then I'm not selling those back issues but the first one had an attempt at programming a gothic style font in PostScript. In retrospect it was hideous but I was very pleased with it at the time!) I'd like to thank all the contributors and also those who've phoned or written to me with suggestions; especially those who didn't realise they were making suggestions but were just phoning for help. I've tried to publish most of the queries I've dealt with over the phone when I felt that they would be of general interest.

The new Editor is David Palmer. He's been a regular contributor and I'm happy to hand over to him. Many of you will have met him at meetings or other events. I won't say too much now because I don't want to steal his thunder but I hope you'll be as good to him as you were to me.

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All Work and No Play?

Mary Mabey

The RMUG Training Weekend October 21st-23rd 1994

The weekend was held at the Novotel in Nottingham- a venue which the committee hoped would attract equal numbers of delegates from both the North and South of Watford! In the event, members from the south east were the most heavily represented. (Perhaps those in the north stayed away because they knew about travel conditions on the M1!) Despite considerable delay The conference started with Colin Watkins of RM giving us an introduction to their latest major investment- the ILS (Integrated Learning System) "Success Maker". This software package, which comes on 3 CD-ROMs, includes material for enough Science, Maths, Reading and Spelling sessions to keep students working for about half an hour daily throughout their school career. An interim report from NCET states that students using this programme are on task for far longer than normal and significant gains had been observed among many students using the system. Colin persevered with a demo of Primary School Maths, English and concepts of shape. He appeared to make some progress although his performance in the auction the following evening made some of us question the "success" of Success Maker with this particular student!

The programme was developed in America by the American Computer Curriculum Corporation which is part of Simon and Schuster. Delegates expressed reservations about the American spelling and voice-over but were assured that only 20 spellings were affected. The choice of texts includes a selection frequently used in English schools. Any sceptics were offered the opportunity to work through the disks for themselves but most declined the offer as the entire course takes 300 hours to complete! Altogether a very interesting session. It was suggested that all students should spend 30 minutes per day using the system. It requires a dedicated server and costs £2,500 for the server software and an additional £600 for each terminal. We were left wondering if the government could compute the capital needed to place enough hardware in schools to make this possible.

If each school has 180 pupils per year group, and each pupil requires a computer for 30 minutes per day, ...how many computers do you need per school?..... add extra time factors for class changeover and the computers needed for other National curriculum requirements.admin....

(Perhaps you need to complete a course on Success Maker to work this out?)

Even without a calculator this surely brings us to the era of one computer per pupil! A most unlikely scenario for most of us and a far cry from the situation in Romania. Lesley Andrews joined us for the opening session to explain more about her task in Romania. She is involved in a project to take computers and trainers to schools in need. She has already been responsible for collecting 4 networks of RM equipment (including a 480Z). She would welcome any donations or offers of help. Please contact her at the address below.

The main training sessions began on Saturday with hands-on workshops for Word and Publisher taken by Jo Hollis and Steve Rochford. There were 20 or so pupils in each class and the atmosphere in both rooms was so **QUIET**. (If only school was like this!) There were a few hiccups with a printer which refused to co-operate but no terrible setbacks - an amazing feat

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considering that the networks consisted of machines ripped out of schools the length and breadth of England, transported roughly by private car and lovingly restored to life by the RM team and User Group the previous evening. Let out for morning break the "pupils" behaved in time honoured fashion, rushing for coffee and cherry topped cakes. Amongst the noisy crowd it was easy to spot the pale, intense, glazed expressions of the brave few who had been attending the Database course with Alan Hollis. They were absolutely shattered with the sheer concentration needed so early in the day! (Will their experience make them more sympathetic to their own pupils in future?)

The most relaxed group were those attending "Microsoft at home" a straightforward presentation held in semi-darkness where the exhausted were able to relax and discover how Bill Gates is plotting to take over the universe by introducing "Golf" to every PC, complete with sound effects which let you know when the ball has hit grass or brushed past the leaves of a tree. His aim is obviously to "invade" your home where women will become PC Golf widows and husbands will carry their half-finished game of golf to work on floppy disk to finish during the morning. (What will this do to the traditional keep-fit brigade who used to frequent the **real** golf course at weekends?)

Luckily the second session was followed by a sumptuous buffet with more cream gateaux than was strictly necessary for even the most hardworking technician or database designer. Suitably fortified we returned for the afternoon workshops. Maureen Wernham led a session on Window Box and standalone computers which was greatly appreciated by the less confident. A large number attended the Access course with Jo Hollis and the technos took the opportunity to sort out problems on Net LM. For those considering a journey into multimedia there was a novel introduction from Mike Hood and his son which warned of some of the pitfalls to be avoided when making your own programs. Despite this long afternoon many people attended the open sessions on cabling, software and Campus 2000. Ian Webster of BT was an excellent speaker, getting everyone excited at the prospect of dialling into Campus which can now support sending FAX messages and has access to a 10 years archive of English newspapers. He demonstrated a search for information on Internet/ BBC Networking club and refined this down to pornography. The result was an article published the previous day about pupils using the BBC club to access pornography. (This system makes searching newspapers cheaper on-line than buying them all on CD-ROM providing that the search is simple and performed efficiently) Another topical search was to plan a journey using AutoRoute from Nottingham to Paris. This gave details of the Channel tunnel, expected times and prices and is updated daily so strikes/ breakdowns etc. will be noted and accounted for in the journey times quoted. *(You could probably justify the cost of Campus on this service alone if you offered to provide up-to-date holiday/travel information for your entire staff!)*

There are many changes afoot with Campus to make it a more economical, curriculum supportive service. Ian explained that the big drawback to improving the user-interface is that the service is still used by a large number of BBC owners which limits the scope of any improvements. (It will definitely be worth spending some time at the Campus stand in January at the BETT show). We were so interested in Ian's session that it was a shock to realise that it was nearly 7pm and time for the

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Conference Dinner.

This truly relaxing event was followed by the keynote address of the conference: "The current state of IT in the National Curriculum" given by Neil McLean of SCAA. He had the unenviable task of settling his somewhat disruptive audience who had just undertaken about 8 hours of solid training, eaten a very good meal and drunk various toasts to RM who had provided the wine. Neil is an ex-teacher and this showed in the highly professional way that he took control of his "class." In the next hour he managed in a light hearted manner to dispel a number of fears about the new IT order which is due for publication in January 1995 and to make us all feel that SCAA is truly on our side. The overall message is that nothing new has been added to the Order. Much has been removed so it is a far slimmer document. There will be only 2 main strands:

- Communication
- Modelling, measurement and control

A set of booklets will be sent out in February 1995 to all department heads showing ways in which IT can be incorporated in their subjects. These should provide a bank of useful ideas which staff can adapt to their own schemes of work. None of the examples are software specific and far greater freedom is given for individual interpretation of the requirements. Control will be focused on the control of events not devices and will incorporate modelling and measurement. In KS4 the emphasis is on pupil directed use of IT. Neil made it plain that SCAA understood how teachers felt about "levelling" students. The new Order will contain carefully worded statements against which a student's capability can be matched. It is hoped that the new Order will remain in force unchanged until the year 2000 so it is deliberately broad to allow for the rapid changes taking place in IT. IT will once more be treated separately from Technology and the first teacher assessment will probably be in 1997 for KS3 and 1996 for GCSE. A most reassuring after dinner speech.

Amazingly nearly everyone ended the evening at the Grand Auction which ran from 10.30 to sometime the next morning! The auctioneer was Colin Watkins, ably assisted by Richard Deakin of RM. The proceedings were hilarious, not least because a number of the bidders kept resorting to guineas. This threw Colin as "Success Maker" has only trained him in decimal coinage. This led to some strange sequences in the bidding where an offer in guineas was accepted although it was actually worth less than the previous bid! Despite the fun, there was a serious side to the affair as a number of people went home with vital pieces of equipment and several items were bought for Romania. Sometime early in the morning the bidding stopped and people drifted off, only too relieved to know that the clocks were due to go back and we would all get some extra time in bed.

The Sunday morning sessions included Excel with Jo Hollis, using Access to manage school records with Roger Anderson, a technical session on networks and a packed session on control. At lunch time I met one of the female delegates whom I had earlier seen trying to pluck up courage to attend the control session. She was calm, smiling, very happy and pleased with herself.

"I was really terrified. I didn't want to sit down initially.... there were 2 women and all the rest were men!

...He made us feel really relaxed, put us in groups according to ability and was so inspiring.

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.....It was really great.

It's the first time I've ever used it without any problems and it did exactly what I wanted it to do."

If you missed this years' training session or felt that it would be too technical for you, I hope that Gisela's comments will encourage you to apply next year. It was very hard work but enormous fun. Those taking the sessions have all "been there before." They know that agonising feeling when everything seems impossible the first time you try it. The conference takes a lot of planning. If there are subjects which you would like us to cover next time please contact a committee member soon with your ideas. We can only provide what you want if you tell us what that is. The group exists to help everyone, from the highly competent technical network manager down to the new home-user, so please make your ideas known to us. If you feel that a residential weekend is too long or expensive and would like a regional one day training workshop please let us hear your needs as we may be able to organise something next term.

RM User Group
Annual General Meeting

The Annual General Meeting will take place on Saturday 18 March 1995 at a venue to be decided.

After the AGM there will be a number of presentations; two of which we are pleased to announce will be:

- Research Machines on the future of networks in schools
- The Internet - what is it, how do I use it, why should I use it?

Further details will be sent to you early in the New Year

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Shop Talk

David Palmer

I feel very disgruntled over failing to get into the last few issues and would hope that you might believe that it was pressure of work rather than lack of desire to communicate! I have a constantly growing sense of respect for columnists who produce calm and reasoned chunks of text on a regular basis.

Far from being calm and reasoned, this is more likely to sound like a cry for help from a therapy session. I will not bore you with the sad tale of my ever-expanding timetable since I know that many others are going through it too. I **will** mention the stress that has appeared in the innocent guise of a CDROM drive. I already have CDROM drives attached to two computers. The two computers come from two different companies (strangely enough, both companies start with 'A'!) and in each case it was, as Bill Gates would say, 'Plug and Play'. I wanted a CDROM on one of my RM machines so that I would have access to each kind of CD format. It has not been a total disaster - I can access the CD drive about 50% of the time - as long as I boot from a floppy first. It has taken at least six hours of concentrated effort to reach this point. I deliberately started with a floppy boot since I could continue to use the station normally while experimenting with config.sys, etc. I bought a Philips CM206 drive with a Jazz sound card, plus PhotoCD and Encarta for £170 from a company called M². The physical installation was fine but the **install** program didn't. Examining the batch file and the manual eventually got everything in more or less the right place. Even so, when I boot from the floppy and it reaches the point where the CDROM driver loads, it doesn't always 'see' the CDROM drive and quite often I have to reboot. So far it has always succeeded on the second try.

When I reached this point I thought I would try setting up a specific config.sys for the station. I decided to try enabling the sound card first. I followed the instructions in the technical help section and ran **copyrmbw** first and told it I wanted **jazz.sys** moved to the right place. It seemed satisfied so I ran **makecsys** and then edited **filemap** but when the station boots it says it can't find **jazz.sys**. I have tried copying the file into areas where it might be able to find it but so far no luck. I have been using doslogon on this station and then running Windows for Workgroups from its c: drive with an 800x600 256 colour display. I really like this setup and was rather disappointed to find that failing to load jazz.sys has upset the station so much that it corrupts the screen in this mode (and any other SVGA mode). Naturally this all coincides with the end of my Insite support. I cannot afford it any longer. I was prepared to devote 95% of my budget to RM but not if a sizeable chunk has to go for support.

So what's the good news?? The training weekend looks to be in good shape. I am fairly confident that those of you who have been to earlier ones won't need convincing, but if you haven't - it is an excellent occasion for learning new tricks and sharing your problems.

Something called Datawatch appeared from the Data Protection Registrar, FREEPOST, Wycliffe House, Water Lane, Wilmslow, SK9 5AF. The pack contains very good teachers' notes, student activity cards, factfiles and a quiz. There is also a sample database on disc. It is all done to a high standard and is free!!

I got a CDROM called (rather misleadingly!) "Hot Stuff" with a magazine subscription and it is a very well organised

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collection of demos and utilities which make the magazine's own CDs look very clumsy. This is probably because the magazine CDs have a Windows front end. They have had a new version of it with each copy so maybe they will get it right eventually.

CPC are back in the "Heroes" section of my database since they now have a very cheap smart switch for two PCs using one printer. It took 3 tries to get the right cables (CSLEAD102) to hook it all up and they sent each pair out overnight to try and sort it out.

Finally, we won a copy of PC Interpreter and it is very interesting. It uses a speaker in the parallel port with no file tinkering needed! I already have a similar device called the Disney Sound Source. Sadly they are not compatible with each other but both produce high quality sound without any fuss at all. It makes me wonder why we have to bother with sound cards and what law of Murphy's is at work so that it is never these simple solutions that become the standard!

RM User Group
Training Day
18 February 1995 at Ackworth School

We will be organising a Training Day at Ackworth School (near Pontefract) in February. Details are not yet finalised but we hope to include the most successful sessions from the recent Training Weekend. The day will cost £25 and this will include lunch and coffee/tea.

At the moment we are intending to structure the day as follows:

10.00-10.30	Arrival and coffee
10.30-12.30	Session 1 - probably two parallel sessions
12.45-1.30	Lunch
1.30-3.30	Session 2 - probably two parallel sessions
3.30-3.45	Tea
3.45 - close	Open Discussion

We intend this to be the first in a series of Training Days at different venues around the country.

If you want to attend then please send a cheque for £25 made payable to RMUG to David Palmer, Ackworth School, Ackworth, Pontefract, WF7 7LT

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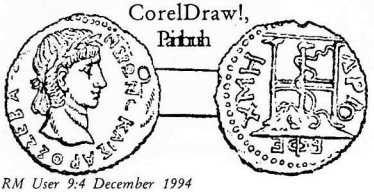
Bible Picture Library

Steve Rochford

The Bible Picture Library is a CD ROM containing a huge collection of pictures (almost 3000, taking up 400 Mb) on almost every topic mentioned in the Bible. The enormous number of stories in the Bible means that these pictures could also be useful in many other areas as well as religious studies. Also on the disc is a simple program to guide you round the disc and a couple of shareware programs to help you manipulate them. Installation is straightforward and an uninstall program is also included to make it easy to get rid of the programs if you want to.

The pictures have been scanned in from a variety of sources and, unlike some scanned clipart libraries, they all seem to have been carefully scanned so that they can be added to essays and projects without detracting from the quality of the written work. All the pictures are royalty free with the exception of the pictures from the Good News Bible but the purchase of the CD includes payment of the appropriate royalty fee to the Bible Society to use these pictures in church or educational contexts. Note that although you may use the printed pictures for any purpose you may not give away or sell the computer files.

The main menu allows you to go to the "filing cabinet" where the pictures are stored, move to a search routine or find information about using the pictures in other applications; this last is a nice touch, giving you the menu choices for taking pictures into Word, Word Perfect, CorelDraw!, Pinbrush and other applications.



The filing cabinet is a quick root into the pictures. It shows you the names of the directories that have been used and allows you to move through them - the half shekels shown here were found by going first to measures and then money. Once you have found a likely heading you can browse through the pictures and, having found the one you want either print it out or make a note of its name for later inclusion into a document.

The search tool is very powerful. It allows you to type in a word or phrase to find and you can look in the name of the file or its description among other choices. You can also use wildcards - very helpful if you're not sure how to spell a name you only need to type the first few letters and then put an asterisk (eg Nebu* will find Nebuchadnezzar) I found the search routine a little confusing; it did what I wanted to do but the screen messages didn't seem right. For example, I tried doing the search for Nebuchadnezzar after several other searches. There's a counter which shows how far the search has proceeded and it starts at 0% and works upwards. After it had got to 15% it told me it had got to the end and asked if it should start at the beginning. What I think it does is start searching from wherever you had last looked (and I'd been looking at Revelations) but it would be nicer if, when you put in a new word, it started at the beginning- it's a minor point but it could get confusing.

Having found an image you click on a button to view it. You can then browse through other pictures which are close to this one ("closeness" means that the filename will be alphabetically close and in

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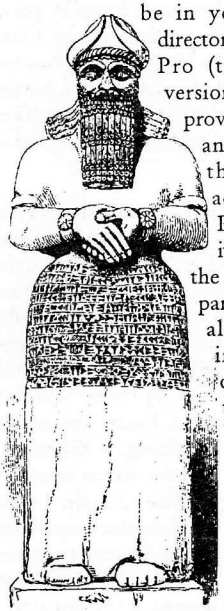
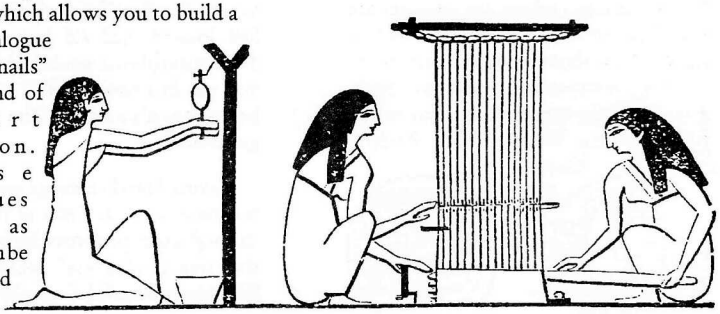
the same directory. Because the directories are well organised there is a good chance that you will find other useful files in this way) When you have the image you want on screen you can click on the print button. This gives several choices. You can print directly at a variety of scales or you can load the image into Paintbrush (which should be in your Windows directory) or PaintShop Pro (the shareware version of which is provided on the disc) and print from there. The advantage of PaintShop is that it will let you scale the image or crop parts of it. You can also copy the image to the clipboard to copy to other applications or you can simply make a note of the filename and then import it into the program you are using.



Also included on the disc is a shareware copy of Image Commander. This is a program which allows you to build a visual catalogue of "thumbnails" of this kind of clipart collection. These catalogues (known as albums) can be saved and searched later. There is an album for each of the directories on the disc. Image Commander is produced by JASC Inc and since the Bible Picture Library was released JASC have produced a program called MediaCenter which is a much enhanced version of Image Commander. A registered version of this is available, together with the new album files needed, is available for just £12 from Christian Computer Art if bought with the Picture Library. (A shareware version of MediaCenter will be available from the User Group library by the time you read this. The full version normally costs £40). MediaCenter allows you to catalogue a much wider range of clipart, including vector files such as CorelDraw or Windows Metafiles. Once you've found the file you want you can just double click on it to load the program you want to use with it (and you can specify the program for each type of file) or choose Edit Copy from the menu to have the program load the full file from disc into memory in the clipboard.

The Bible Picture Library costs £49 for a site licence which allows its use on any computers within a single institution - it works on network or standalone computers. It's available from Christian Computer Art at 12 Crundale Crescent, Cardiff, CF4 5PY (Tel: 01222 758484)



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Canons Away!

John Buckley

Machines. Some I love, others I hate. Then again, there is a love-hate relationship with others. The Mini car comes into the latter category, I owned two of them. Compact, forward thinking. I grew to hate their idiosyncrasies. Rusting sub frames and sills. Wet ignition systems, leaking oil, collapsed knuckle joints. The Bubble jet printer comes into the same category.

They tell this tale about a Japanese Canon technician accidentally discovering the bubble jet principle by touching a soldering iron against a syringe. About as likely as King Alfred and the burnt cakes? Having cornered the printer market effectively as Intel and IBM, millions of computer users are blessed and cursed with them. I use one at home. It is wonderful: quiet, quick, reasonably cheap to buy, producing page printer quality. It is as liberating to a dot matrix user as the bra-less revolution of women libbers.

What's the snag? The ink cartridge. Whilst setting up a new IT room at school someone didn't budget for a printer. I decided that a Canon BJ 230 would do the job. A3 printing. No page printer I had seen would do that. Yes, I calculated, it did cost more to run , but we couldn't afford the extra £300 for the page printer. This event now coincided with another innovation. RM had put an excellent new application on the Network. MicroGrafx 'Draw'. Self deception is a common human trait. It has been proved beyond all doubt by 'Draw'. The students feel a deep sense of satisfaction printing out pictures from the clip art library. A sense of achievement that must be normally missing from their lives. Why else would they print out someone else's picture and actually feel proud of it? To stop them doing so induces frustration, deprives them of a full IT experience, antagonises the little darlings, even hurts their feelings. However, the privilege of achieving this level ten skill involves the department in awesome budget overruns and the sort of hilarious horror story that made James Herriot a rich man.

'Sir, the printer has run out of ink', causes shudders of awful anticipation to run through me. I suppose others might even get a sexual type thrill of the sort that causes people to trek across the Cairngorms after they hear about the latest death on the news. No doubt a City Technology College IT teacher merely 'pages' the technician who removes the BC2 Canon cartridge from the store, pops up to your room and replaces the old one. All done in a matter of minutes. At £20 a time? Not for the likes of the ordinary mortal. Whilst the manual may specify 700,000 characters per cartridge, printing pages of graphics reminds me of the old jokes about American cars: they consumed fuel faster than the gasoline attendant could fill them up. I quickly worked out that Canon was only kidding about chucking this piece of Hi-Tech in the bin. Refill it. It was suggested in the 'RMUG' magazine using drawing ink. That was definitely a NO! NO! Two empty cartridges were rendered useless using 'Quink'. With a world in turmoil over the cost of Canon's cartridges the market place had identified the refill market as the growth area of the nineties and so the efficiency of refill systems has improved, the price dropping and the wholesalers can even find the necessary bits in the UK.

Now, imagine it. A black hole in the side of a little plastic box. A syringe, a bottle of black, and I mean **black**, ink. Remember the black slime in the Star Trek episode? It

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consumed people at will. The syringe is pretty scary too. It reminds me of drug abuse and people fainting whilst being inoculated. Some kits provide plastic gloves. This gives the whole thing a Very Serious Image. Step one: take the syringe and fill the cartridge. No way! Cover table. Change clothes. Send every one away. Brew a cup of tea. **Then** the ink. Some kits expect you to use the same needle more than once. Watch out! This once caused high blood pressure and much hilarity in my department. Little did I know that the old ink had dried in the capillary. I gently squeezed. Nothing. A little harder. A little harder.

It is difficult to find a word to describe what happened next. Perhaps it was technically similar to the failure of the seal in the space shuttle fuel sections some years back. The NASA crew were tragically killed. Thankfully the consequences of my technical failure weren't as serious. A jet of the black concentrate called inkjet-ink fountained up my right arm. Over my shirt sleeve. Over the suit. Over the table. On the upholstered seat cover. The carpet was already black. Having experienced the potency of the foul liquid before, I immediately sprang into action. Jacket off. Shirt off. (Union insurance is great but like all claims involves form filling.) Down the stairs to room below. Copious amounts of water. The Head of Faculty was sympathetic but highly amused. The students were unsympathetic: 'Sir! Is the printer working again?' The idiots, can't they see I have a major emergency on my hands?

Much chastened, I have two main ambitions in life where it comes to my Canon printer. One is to find BJ Printer Windows printer drivers, as rare I suspect as the Yeti. The second? Well, obviously, to get the page printer.

I've also tried refilling cartridges and decided that even if they do cost £20 a go and destroy the environment into the bargain I just don't have the time or patience to refill them so I just buy new cartridges and throw some very sophisticated technology in the bin.

Action Computer Supplies (0800 333333) have recently started selling a different type of refillable cartridge for the HP DeskJet which uses a "tank" that slots into the outer plastic holder. These are cheaper to buy than the standard HP double capacity cartridge but don't seem to last as long so the end result is about even in terms of cost but it is much more environmentally friendly.

Another alternative is to use an Epson Stylus printer. These cost about the same as the DeskJet but don't use such expensive and wasteful cartridges. I don't have experience of them on a network but I know that most Epson printers do work well.

Finally, if you are printing large numbers of copies then it's worth doing some sums about page costs over the lifetime of the printer. Suppose that you do 250 pages per week for 40 weeks per year and the printer lasts 3 years. The printer costs £200 and each page on an inkjet costs about 5p (1,500 characters per page and 700,000 chars per cartridge at £20) so the cost over 3 years is £1700. A Kyocera FS1500 laser printer costs about £1300 but each page costs about 0.5p so the total cost over 3 years is about £1450. Since we bought our Kyocera to replace a DeskJet we've done many more pages but the total cost is still less than the DeskJet.

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Thoughts on a Net LM 2 upgrade

Martin Smith

The good news is that the upgrade is a GOOD THING, of course there are some glitches but after 3 weeks the network is working as I hoped it would and I am feeling MUCH more positive than this time two years ago when we installed NET LM 1.

RM support engineers have again proved their value, the engineer who performed the upgrade was most helpful, working beyond the limits of his defined job sheet.

This upgrade was complicated by the fact that I was also installing an extra interface card, 4 laser printers, 16 D-series stations, cabling a room, 2Gb hard disk with DAT and remote printing software.

Some specific thoughts:

Server Interface card 16 bit or 32 bit. You Can NOT (repeat NOT) add a 32 bit card to a server with 16 bit cards. I missed this in the documentation. To be fair to RM (As I always am of course) they sorted my mistake out for me very quickly and my local sales chap 'couriered' me the correct card in time for it to be fitted (thanks Trevor).

The upgrade requires two days of engineers time. I personally welcome this as it reminds my management team what good value I am and how much I deserve a pay rise. RM recommend that the network is down for two days whilst the upgrade is performed and the manager is available and that the net manager allocates a further two days after the upgrade for the Net manager to complete the upgrade process whilst the network is down. In my school I felt it reasonable to get two days "off" whilst colleagues covered me but felt that four days would be unreasonable. In retrospect the first day of the upgrade is very routine and required little input from me (mind you my floppy disks are very organised now), It would have been better if I had been free for the second day of the upgrade and also the day after the upgrade, as it was it was the usual upgrade midnight shifts to get everything working as quickly as possible. Have your documentation as up to date as possible, this did genuinely help on a couple of occasions.

You are entitled to have two non-RM supplied applications installed. Obviously it makes sense if these are "difficult" applications with different reasons for being difficult. I chose Turbo Pascal 6 and also FlexiData, this was a mistake as FlexiData is not at all difficult, I could have used the engineer's time better on a different package.

I'm lucky to have several stations with local hard disks. To these I copied the entire contents of P:, L:\BIN and my N:. This meant I could simply copy back all the MTSLs I have created over the years, for example. By the way there seems to be some mystique that old MTSLs won't work on Net LM 2. In my experience they mainly do. (See exceptions later). I also copied files for some colleagues BUT pupils were responsible for their own work. In practice this meant the lower school ensuring they had print-outs and 'A' level students ensuring they had floppy copies of work.

Using the mouse in DOS applications such as PAINTSPA . By default this is not enabled, obviously the mouse driver uses some memory. The best solution is to amend the default station's configuration files to enable the mouse, there is then no need to amend MTSLs. Sorry this is vague but I have left the notes at school, the documentation from SPA is very good on this and they (as always) were very helpful

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with helping me solve this.

There are a couple of 186 specific issues, see separate note which I have just put on the bulletin board.

After about 10 days I found that for no apparent reason and apparently at random different stations on different cable segments would fail to complete the boot process. After much swapping of cable, many calls to RM and weeping and gnashing of teeth it transpired (three days later) that it was necessary to add a line to LANMAN.INI to increase the number of sessions or something technical like that, it is probably best to get the exact line for your system from customer support should you need it. If you are interested I could post the line I added but I am not sure how system specific this fix was.

THE BAD NEWS

I had to make a reasonable number of calls to customer support to iron out the glitches, they were very helpful and supportive BUT each of these calls counted against my annual allocation so that today when I phoned about an 'undocumented feature' the engineer (very politely) told me that my credit was -23 units so she could not help and I would need to spend 200 pounds to get more credits. The appropriate department did agree to 'zero' the account so that the engineer could help. I think that perhaps there should be a period after a major upgrade when phone calls do not count against your credit. Again to be fair RM are investigating this and may offer a cheaper solution. In similar situations in the past I have always found RM to be very fair.

Hope all this has been of some use, I'm certainly v. pleased with the upgrade, the system seems far more stable and generally faster. Under Net LM 1 if I used file manager to log on to drive R: with about 900 sub-directories it took an appreciable time (go and get a cup of tea) to update the window, under Net LM 2 this is virtually instantaneous.

(Editor's note - this may not be entirely due to Net LM 2. When using Windows 3.1 File Manager on Net LM 1 the same sort of speed increase is seen).

The GSUPER desktop in NETLM2 allows some control of the Network, notably Queue manager but does not offer all the lesson to lesson utilities which we needed for our network. I have been able to add most of our 'wish list' using the following solutions.

- Ability to give password when pupils forget: I've added Steve Rochford's PASSCHNG to L:\BIN which gives GSUPER members the ability to give pupils a new password.
- Ability to allow pupils to logon when they have crashed out and are denied a 'second' logon. The following MTSL which I call GETON allows this:

```
exec net admin \\serverx1 /
  command net stop netlogon
  & net start netlogon
```

- Ability to deny pupils access to particular printers or allow access if it has been denied. Before the MTSLs will work you will need to create an 'ACL for the printer at the server by typing

```
net access \\serverx1\print\
  printername /add:users
```

It took me several goes to type the above line in correctly, in fact with my single server network I omitted \\SERVERX1 and this seemed more reliable.

Then the MTSLs are similar to

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```
rem turns printer on
exec net admin \\serverx1 /
  command net access
  \print\printername  /grant
  users:c

rem turns printer off
exec net admin \\serverx1 /
  command net access
  \print\printername  /revoke
  users
```

- use of a 'pool' which any user can copy files to or from.

This can be done by creating a directory such as C:\POOL.

A share can then be created e.g. share POOL as C:\POOL with unlimited connections

At Public level connect e.g. drive Y to POOL.

It is then easy to amend the COPYFILE MTSL to include reference to Y as well as A and N (make sure you keep a copy of the original)

We are still using many 186 stations an well as 486 machines. There are some issues which seem to be specific to 186 stations which tech support are not fully conversant with. It is important to use the change desktop or Printer Management utilities on the appropriate type of station. That is if you wish to use a printer with a 186 use a 186 when you log on as admin to use print manager. This is emphasised by the fact that the ADMIN desktop contains icons for desktop and printer management. It does NOT contain an icon for Station manager which is surprising as some changes to 186 stations can only be made if Station manager is used from a 186. This became evident when I created a new station type which allowed a 186 to use a local serial printer. This station type was only available when logged on to a 186, not a 486. Once this is realised it is easy to add the station manager from L:\BIN to the 186 desk-top.

Creating the above station type was less obvious than might be expected. RM supply a couple of useful faxes concerning configuring 186 stations to use a local serial printer under Windows. BUT these assume that when you run the Windows Control Panel print manager you are able to connect the printer to COMA or PRN. However by default Windows 3.0 does not offer PRN or COMA as a printer port. On a stand alone you could edit the WIN.INI file on NET LM 2 you have to edit the U:\WIN30\RMWIN\RMWNA\186.RMI file (make a copy first) and amend the [RMEXT.WIN.PORTS] section by adding a line such as COMA:=9600,n,8,1 or PRN:=9600,n,8,1. Reset the 186 station to enable this change then you can use the RM faxes to create a new SYI file and hence a new station type. By the way a point I find ironic is that RM state that local printing to a serial port on a 186 is not a supported option. When the 186 first came out one of its major 'design features' was that it did not come with a parallel port as standard. This caused inconvenience, not least with the COMA convention and the fact that every printer you bought cost an extra 4o pounds for the serial interface, and now they don't guarantee to support the imposed serial port!

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Bulletin Boards - What, Why, How?

Robin Collins

It just ain't fair is it? There you are, you've got the new computer system up and running, everyone is happy and so you decide to sit back and have a read of a few computer comics, perhaps catch up on the back issue pile of RMUG mags when WHAM! You find that there are things going on in the outside world that seem to have missed your attention. Everyone and his dog seems to be going on about "Cruising the Information Superhighway", or "Surfing the Internet" or other strange sounding pastimes. The magazines that used to carry such useful stuff as "101 uses for a dead 186" or "How to use a wordProcessing program that doesn't have a capital letter half way through its name" are now full of bumpf about modems and Compuserve and CIX and all sorts of other jolly sounding pastimes. Just to cap it all you read about something called the RM Bulletin Board, and how it is really jolly useful and full of lots of things a chap could find helpful in the day to day struggle. How to get to use it is the problem. Seems that one has to have something called MODEM and a COMMS PACKAGE. Well, something like that anyway.

The original basis for this article was to satisfy a need that had been expressed for a simple guide to actually getting on to the RM Bulletin Board Service. Easy-peasy, no? Well, the problem with all such guides is just where to start, and with computers and bulletin boards, the start can be a long, long way from the finish line. So, let's take a deep breath and plunge in to the magical(sic) world of Computer Communications , or Comms as it is affectionately known.

Just as in all branches of things computer, there are first of all, some definitions.

A 'BBS' or Bulletin Board System is little more than a computer equivalent of the staff room noticeboard. Although you can't actually see it (the BBS that is, though come to think of it.....) you use a BBS in exactly the same way. People put up notices for others to read, for sale and wanted adverts are placed, and general chit chat passed around. The only difference is that with a computer, you don't actually wander around with a handful of drawing pins and a forest worth of photocopies, but the principle still holds good. The only real problem is learning how to use the beast in the first place!!.

In order to use a Bulletin Board, you have to acquire a few new skills and learn a bit about a subject, shrouded in mists and folklore, called 'Comms' - short for communications. Actually there is not a lot to it. Like most technology it has its high priests and gurus, who have their own particular language steeped in jargon, but for us mere mortals it is mostly totally irrelevant to the task of getting started.

The following may however help us along the way.

BBS this we already know is a Bulletin Board Service.

Modem An important bit of machinery that allows computers to communicate or ***'talk'*** to each other over a phone line - if it is of interest the name is derived from MODulator/DEModulator. This refers to the process that converts the digital signal from your computer into a modulated form that the GPO (sorry, BT) can cope with. At the other end there has to be another modem to unscramble the mess into

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something a computer can understand.

On line A term that refers to you being in contact with the other computer on the telephone line. Yes it does refer to a terminal or workstation communicating with a host or mainframe, but that's not really relevant.

BAUD Pronounced either like BORED or to rhyme with LOUD, as takes your fancy. This term has become **incorrectly** linked with the speed at which a Modem can pass information. Obviously the amount of time you spend on line will affect your phone bill, so it helps to have a fast modem. The current and more reliable measure is in **Bits Per Second** or BPS. A good number to look for is 14,400 often reduced to 14.4k. This is actually more like a top speed indicator, it can of course work slower if the modem at the other end of the line has a lower top speed. There are many faster models on the market, speeds of 19,200 bps being common.

Comms Package

Just like everything else, you need some software to allow you to talk to another computer (and its user). There are many flavours of software, the cheapest is the one you got free with Windows. It shows up as Terminal on your Program Manager. There is some good software on the RMBBS, but of course you've first got to have it to get it.....! if you see what I mean.

It is always tricky when you get to the chicken and egg problem, but in this case I would say that the modem definitely comes first. Without it you are going nowhere. If you have an RM Standard InSite Support Contract you should already have their modem. This will probably be a nice fast machine and may or may not have fax capabilities as well - oh yes, that is just another trick up life's sleeve. With modern modems and the right software you can use the PC as a fax machine. There are pluses and minuses to this and it will be left to a later article. The RM modem may well be a Pace machine, and if you are in the position of having to buy a modem, the PACE range offer good value for money. I do not intend to get into arguments over this comment, there are many other excellent machines on the market, but for the complete novice it may help to have a machine which is known to RM in case things get a bit awkward. Budget for around £200 - £400 for a really good modem. Take a look at the RM catalogue for specifications, and go for the fastest modem you can afford. If in doubt, phone 'em and ask. Of course they'll tell you to buy the most expensive they have, but that's just good business. Virtually every advert in the computer comics includes modems somewhere, and there are always tests of new models. Look for a modem that can go up to 19,200 bps if possible. Ignore the temptation to buy one of the cheap 2400 bps modems being hawked around at present. They are so slow it will put you off for life!!

As to software, again Standard InSite Support Contract holders will get appropriate software with the modem, possibly the bare bones of PC Anywhere which is really for the benefit of RM when providing remote support. The fact you can use it to talk to the bulletin board is incidental. If, however, that is all you want

to do then it works very well. Installation is a doddle, and you can get up and on to the BBS in no time.

The alternative is to provide your own software. This is not expensive, because you can use Windows Terminal to get on to the BBS, and then download a free programme called Panther which will give you a lot of good comms software for nothing. Users of MS Works 3 will have the quite proficient communications module of that package, but be warned - Windows is generally a slow way of working, and a good DOS package should be unearthed as soon as possible. There are a number of integrated DOS and Windows packages with comms modules all of which will do a good job for you.

How to actually get on to the BBS is really where all this started, so let's cover that next.

Connect up your modem according to the supplier's instructions - don't you just hate comments like that?

Install the comms software - again following the instructions.

Check to see if your comms software has any form of capture or recording facility. This is very useful to play back what you did if things go wrong. It also helps capture information which you may forget to note down. This is not mandatory, but I found it a great help. Some software has an intelligent script learning system. This records the logon procedure that you use and can then be replayed next time you log on. The only difference is that the first time you log in to a BBS you are asked a number of questions that will not be repeated, so disable this feature first time round. Use it next time round and then edit the script to save all sorts of repetitious typing of names and passwords.

Tell your modem to dial the RM BBS number (01235 826283) and wait. If all goes well you will be greeted by the chirpy chirpy cheep cheep of modems saying "G'day" to each other, followed by the RMBBS welcome screen.

If this is your first time on to a BBS, DON'T PANIC. The procedure for everyone is to type in your first name, then your last name. If you have not registered before you will be asked if you have spelt your name correctly. Assuming you press [y] then you will be taken through a couple of screens into which you put the relevant answers. You will be asked for a password, and it isn't quite as easy to sort out if you forget as it is on your school network! You may also start to come across one of the more illogical features of the BBS world - the "sometimes you press [RETURN] and sometimes you don't" problem. The main rule is to watch the screen for prompts and don't assume anything. Incidentally, for those of you who have not used BBS's before, the RM flavour is better than a great many others when it comes to this point.

Most of the other parts of the questionnaire are pretty self evident except for the last question which asks "Which default download protocol do you want to use?"

Protocol A quick way of thinking of a protocol is as a standard that is understood by two computers at the end of a phone line. This standard is used to control the uploading and downloading of files to and from the bulletin board. Early protocols were very simple and did not help if transmission was disrupted due to line interference. Later protocols contain error checking and other enhancements to ensure that what is sent is what is received.

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As I mentioned earlier, it is easy to feel totally at sea if this is an unfamiliar topic. Just follow the recommended option and all will be well. Without going into too much detail at this stage, Zmodem is generally the recommended choice when you come to actually download files (butif this is your first time on and you are using Windows Terminal then you should choose XModem).

Having completed the registration formalities, you can immediately start to use the BBS, though your access will be slightly restricted for the moment. You will be able to have a look at the Newsletter, access general help notes on how to upload and download files, and how to use the PKZIP/UNZIP utilities. You will be able to access a number of the file areas and conferences that are going on all the time on the BBS. As you do so, you will find that you are in a structure that is menu driven, with most commands being a single letter and/or [ENTER]. It is the type of set-up I always picture as a large flat area (THE MAIN MENU) with a number of ladders leading down to various levels. You have to climb back up one ladder before going down another.

Downloading files is not hard. You just need to make a note of the file name you want, and then use the Download option. Type in the name and transfer protocol, then ..... well, that depends on the comms software you are using. The PC Anywhere stuff from RM just gets on with it, others vary from pressing Page Down, Return or anything else their creators have dreamed up as being thoroughly non intuitive. Again, you must read up on your software before using it - especially as your on line time is costing you money.

The next step is dependent on whether or not you have a Standard InSite Support contract. Contract holders will need to send a message via the BBS giving their contract number. Usually next day, you will then be able to access the full range of services from the BBS, including "THE INTERNET" which is where we came in. Logging in next time will be alot quicker and easier, and it is then a question of browsing around and seeing what goes on. Be logical and make a few notes as you go along. You can't break anything, and if you aren't supposed to look at something, you won't be able to and it's as simple as that.

This is by no means the whole picture, and so far I have not mentioned the most important part of the BBS, and that is the Sysop. This is actually a human being called Steve Wheeler who is the man behind the machines at RM. As SYStem OPerator he is "In Charge" of the BBS, and knows a thing or two about it. On a general basis, the sysop will watch what is going on on his BBS, and will get a bit upset with abuse of the system, so please respect the amount of work he puts into it.

I hope the forgoing will have been of some use and interest to newcomers to the RM BBS, happy surfing!

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The Times World Map and Database

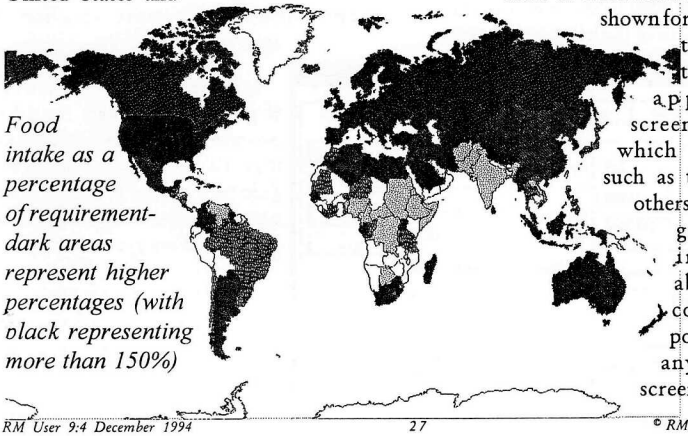
Steve Rochford

The Times World Map and Database is a Windows 3.1 package which allows you to look at maps of any part of the world in a range of scales from full world on screen to 1:4m which fits the area from Cornwall to Leeds on the screen (although getting that view isn't quick - to zoom in from the whole world to the south of England took about 20 seconds on an RM 486 DX/33 accelerator with 8Mb of memory!)

When you first look at the map it is coloured to show the different county boundaries but you can choose to shaded the map based on any of over 50 statistical themes ranging from the percentage of GNP donated as aid to the percentage of the workforce employed in service industries. You can have the computer choose to group the countries to give either equal numbers of countries in each of the seven shading bands or roughly equal splits in the numbers represented or you can set the shading bands yourself.

Some of the statistics are not initially very useful - for example, one is the number of cars in use. This appears to put the Russian Federation at the same level as the United States and Canada unless you adjust the shading bands. It would be more useful to know the number of cars per person which would even out the discrepancies caused by Canada having a population little more than one-tenth of the USA, for example. You can get at this information by looking at the data for each country in table form, copying the data to Excel and then doing a simple calculation. Of course you can't then map this data but you can make charts from it if that's appropriate. You can also make charts in the program itself; you simply select the countries about which you want information by CTRL clicking on them on the map or on their names in a list box and then going to the table and picking the information you want. The only type of chart available is a bar chart but this is adequate for most of the data and the ease with which data can be moved to Excel means that it shouldn't be a problem.

The other problem with the statistics is that some potentially useful information is completely missing. For example, there is no data about the climate of the countries



Food intake as a percentage of requirement - dark areas represent higher percentages (with black representing more than 150%)

Selecting any country allows you to look at information such as that shown for the USA. The tabs across the top take you to appropriate screens, some of which are numbers such as those shown; others are free text giving more information about the country. It's possible to copy any of these screens both as a

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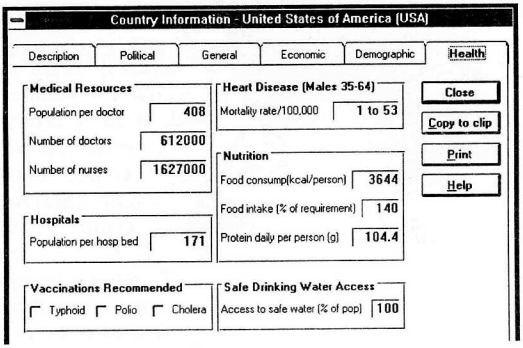
picture or, more usefully, as text which can be pasted into a word processor or spreadsheet as appropriate. Note that all the information is Copyright © Times Books 1994 and although the manual gives a lot of information on what you mustn't do with the data it says very little about what you may do. It seems fair, however, to assume that you can use it as you would information collected from the equivalent books.

There is also a set of screens of comparative information so if you want to find the largest city in the World then you just call up the table of cities and click the button to sort on the population (it's Mexico City with a population of nearly 19 million).

The nearest program to this is PC Globe. The biggest disadvantage of PC Globe is that it's a DOS program which requires a lot of memory - it's very difficult to get it working on a network station. World Map looked much more promising because it's a Windows program. PC Globe is much quicker both to load and use than World Map but it's much less easy to get data from it into Word or Excel. My comparisons of the two show that there is much more data available in PC Globe and I prefer the way it can be accessed. For example, if you want to look at a particular country in terms of the life expectancy of its population and then compare it with other selected countries then both programs are easy to use but if you want to compare your chosen country with the top or bottom 10 countries then PC Globe is the only one to use - you would need to know the countries and then select them individually in World Map.

Overall, then, the package is an excellent idea which is not quite finished. There were a number of minor bugs (none fatal but simply confusing - if you've chosen to use the grey colour scheme which I picked to bring the screen shots in here when you go back to choose a second set of colours you find that the bottom set of colour buttons are missing. If you know where to click they work, you just can't see them!) and the slowness started to really irritate me. You can turn off the colour fill but this doesn't really speed things up. The slowness is mainly due to the high quality of the maps which are stored as vectors, allowing you to zoom in without the picture becoming grainy. Unfortunately, when you copy the map it is copied as a bitmap which reduces the possibilities for working on it further. The data which is used is actually stored as a Microsoft Access file so it would be possible to devise your own routines to use the data although this may be prohibited by the terms of the licence agreement.



I shouldn't be too critical of it. If you want a simple database program with some good maps then it's more than adequate. At £135 for a 20 user licence it's also very good value - I suppose I'm just greedy and always want more!

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StopIt - The Print Job Management System

Review by Dave Griffiths (network manager)

Cheltenham and Gloucester College of Higher Education (CGCHE) currently have an RM Net LM 2.0 network with around 150 workstations. At assignment time every workstation is used and most students want to use the network laser printers. In the past controlling the cost of laser printing has been impossible.

The problem has always been that it is difficult to guarantee that every student who prints to the laser printer will actually pay for it themselves. In the past we used an honesty policy where a money box was left by the side of the laser printer and when a student collected his or her printout they were expected to pay for each page printed.

However, this method doesn't work. In the frantic rush to meet an assignment deadline some students do not pay for their printouts, they may not have the correct change on them, or they may have been a bit "trigger-happy" when printing and feel that they should only pay for the final "correct" printout, after all who wants to pay for a printout that has errors.

To keep within our budget and insure that we do our bit for the environment by reducing paper waste we needed a system to control the cost and amount of paper used by each student.

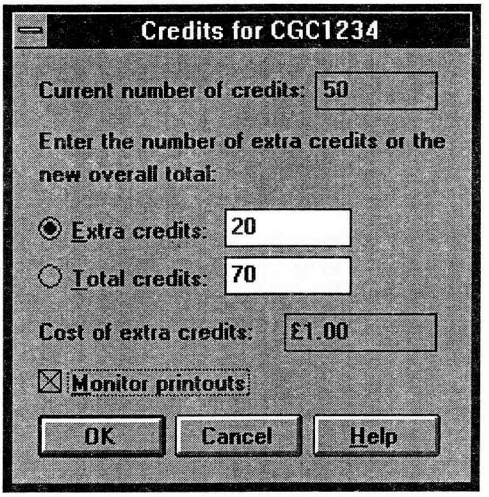
This is where StopIt comes in...

StopIt maintains a printing account for each network user allowing you to control print costs by charging the user for each page they print. Users can be given credits or they can buy them from the network help desk. When a page is printed, one credit is deducted from the users account. The amount charged for each credit can be determined by the network manager.

There are various settings available. Some users may not need to have their printing monitored, for those that do, it is possible to allow them to go into an overdraft or, if they do not have sufficient credits to delete the print job. In this case a message can be sent to the user explaining that they cannot print and suggesting that they purchase more credits.

StopIt will handle in excess of 7000 users, (on our last count StopIt was controlling just over 8700 users). Users can be added individually or in bulk from a comma separated file. It is also possible to allocate a fixed number of credits to all users with a single menu command.

StopIt works with Postscript and HP compatible (PCL / HPGL) printers, it works with LANSpool remote printers and those attached directly to servers. It consists of four inter-linked programs, a scanning module, a program for checking



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your credit balance, a small pop-up message service and an administration utility.

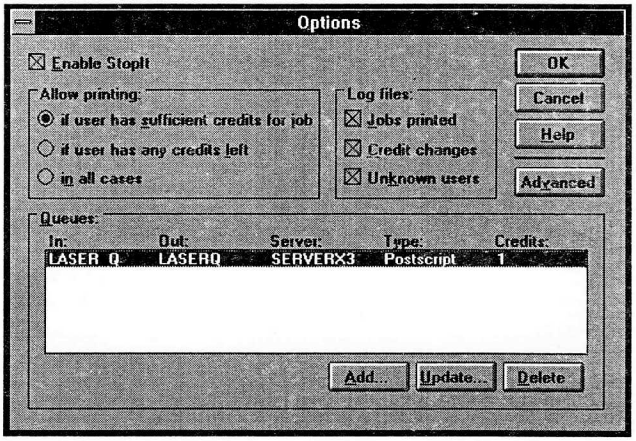
The scanning module is at the heart of StopIt and requires a dedicated networked station to run (PC186 upwards). This station must have full network privileges so a password is required when exiting. It operates by holding the print jobs in a preliminary queue where the pages can be counted before being printed.

A major benefit is the log system. Whenever a user's credits are altered or a job is printed StopIt records this in a log file. This file can be viewed from the administration utility or loaded into Excel so you can produce reports and graphs. Also, this log can be used as proof if a user queries their credit status, by referring to the log file you can determine when they printed and how many pages they printed.

Users may check their credits at any time by using credit check. This utility may also be run as a public logon program making sure each user is kept informed of their credit status.

The administration utility may be run from any Windows 3.1 network station and has several levels of security. Staff at the help desk can be given restricted access so they can add or delete credits for a user. The network manager has unrestricted access allowing him or her to create and delete StopIt users and change advanced features within StopIt.

StopIt has dramatically improved the way we control printing costs at the college. We have been trial testing StopIt for around six weeks and have noticed a serious reduction in the amount of paper wastage and if StopIt continues to run faultlessly will be a valuable resource to any school or college.



For further details, contact:

Flo COMPUTER SERVICES

14 Hutton Close, Keynsham, Bristol, BS18 1XW

Tel: 0272 860885 (answerphone 9am-4pm).

STOP PRESS

Stop It is now available for use on Net LM 1.2 as well as Net LM 2 - it no longer needs Windows 3.1

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Net LM Hints and Tips

Managing Desktops

One of the selling points of Net LM is the way in which an administrator can set up a range of desktops to be used by different groups - you put Year 7 English software on one, Year 8 Maths on another and so on. You then make people members of the groups as appropriate and then when they come into a lesson they simply do a group logon to the appropriate group and the desktop which appears has just the software which is needed. The other way of working is to make all software available on the public desktop. You then don't have to bother about groups and group logons and there is only one desktop to administer which can make life easier when you buy a new piece of software. For example, suppose you buy Microsoft Publisher. It obviously has value to English teaching so you add it to all the English desktops. What about History? Pupils often produce project work in History which could use a good DTP package so you need to add it there as well and so it goes on.

If you don't want to have all the software you have available on every desktop (and there are good reasons why you shouldn't. If you have lots of program icons and, worse, lots of groups in Program Manager then you use up precious Windows resources to the point where you can't run any programs) then what can you do to make the management easier? One way is to have some of the desktop groups common to all the Net LM groups. For example, you might have a section for major applications like Word and Excel, one for drawing programs like Micrografx Draw and Paintbrush and another for CD ROMs. Now when you want to make changes to the applications group you make the changes for one user - public, for example, and save the changes. You can now copy the .GRP file from p:\progman\public to all the other p:\progman\<groupname> directories. Provided that they expect to find that group file (in other words the group with that name was previously added using program manager setup) then they will read the new group file and show your new or altered application. Be warned that the group will appear in the place you set it up initially so it makes sense to always have these common groups in the same place and with other groups iconised. An alternative would be to have the subject specific group showing on the left, the common applications group taking up a small area on the right and then the other groups iconised but set so that when they are restored they will each pop up into the remaining space. A good rule is to be consistent in the way you arrange groups. This way changes should not confuse users too much

Changing groups while logged on

One of the disadvantages of working with different desktops for different groups of users is that it makes it difficult to change what you're doing while you're logged on. For example, suppose that a Science class starts working and someone in the group wants to use a piece of software which is only on the Maths desktop. It is, of course, possible to log off and back on again but this is time consuming. It would be better if you could just click on the Network button and choose to reload a new desktop. Well, this isn't possible but there is a program on the bulletin board which might help. It's called DESKSEL and it was written by David Taylor (who used to work for RM and has written many utilities to help with network management over the years). Some people find that it doesn't

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work for them but others find it extremely useful. If you have access to the BBS then it's worth trying it; after all it won't cost anything to try!

Backup tapes

One of the pieces of information I gleaned while at the Training Weekend was about tape use. The recommendation was that you should clean your DAT drive about once a fortnight if you backup daily and that you should replace tapes after 3 months of daily use. If you rotate tapes according to a schedule like that published in the last RM User then you can use each tape for longer but aim to retire them after 40 - 50 uses.

The RMBOOT service could not be stopped. It did not report an error

I've seen that message on my server more times than I care to think. It always means that the server will have to be stopped and work lost and I've been told that it's invariably caused by cable problems. This term I've had the problem just once compared to 2-3 times in many weeks last year. The big difference that I can see is that I'm making sure that the PDC has a large amount of free disc space. At the weekend we were told that you should aim to have a minimum of ½Mb of space per logged on user plus a further 20Mb - for me that means 40-50Mb free and I've been able to do that with, so far, no problems in terms of server crashes. Last term I frequently had less than 5Mb free!

One of the things that would help keep some space free would be to have a utility like the Netdsk program that came with Net 3. I've mentioned this many times before and, at last, RM are about to release Space Manager which controls the amount of space a user can have. I have no details of pricing or even full details of what it does. I really hope that they've kept it simple with a price to match rather than throwing in lots of facilities which will no doubt be useful but take the product out of my price range; RM Auditor is an example of this. It does just about everything you could possibly imagine and is 10 times the price I could pay. Meanwhile, Flo computer systems have NetSpace Plus at £50 (Tel 0117 986 0885 or see their advert on the back cover) and by the time you read this Edhitec (Tel 01423 871027) will be selling Richard Naylor's space checking program at a similar price.

The other change I've made is to give up on Windows logon and use Doslogon on about 25 stations. The shell program is then an MTSL which loads Windows 3.1 (I'm still using Net LM 1). So far this has also been **much** more reliable; instead of 3-4 crashes every 40 minute lesson I get perhaps 2 or 3 per day which is far more acceptable. Ideally I'd like to move to Net LM 2 but I can't afford to do it this year. I was afraid that working like this would be much slower than booting into Windows and then just loading the desktop for each user but in practice there's not a lot of difference and the fact that everyone will be able to log on without any machines crashing makes the start of lessons much less fraught! I made the change to my 386 and 486 computers; the next step is to try it on the 286s. All those in teaching rooms have got 5Mb of memory so it should be OK.

The original instructions for LANSpool recommend that you do not use the interrupt driven driver for parallel printers. As far as I know this is still good advice, particularly if you want to use PC186 mode on the LANSpool station. Two of my LANSpool stations are S-Series 486 computers on which I don't load the 186 mode drivers (they take too much memory) so I've been trying the interrupt driver. So far it doesn't seem to cause any problems and I think it's a bit faster.

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Your Magazine

I really do welcome items for the magazine from anyone. You don't have to be a great writer to send something in; send a letter or a short tip for the Hints and Tips pages, everything is welcome. If you want to phone and talk something over then please do; even if you aren't sure how to write something down then I can always include your ideas in Hints and Tips or as a plea for help; some of you will recognise your phone calls on the Hints and Tips pages!

I would be particularly pleased to hear from the people who are using RM computers at home; there are quite a lot of you out there. Some of you will be experienced at working with computers and I would be interested to know why you chose RM for home use. Others will have responded to RM's advertising, perhaps because your children use the same computers at school. How are you getting on with your new machine? Did you have any problems getting started? It doesn't matter if you still don't know the answer to the problem- this is how you'll find out - and it doesn't matter if you think that your problem was trivial; remember that there are many other people who are going to be in exactly the same position as you and will welcome the help that you can give.

If you are writing for me then the ideal is to send me a disc produced using Word or Word for Windows but I can cope with any word processor that runs on a PC or Nimbus (I think). If what you are sending is short then a letter on good old fashioned paper is fine. I can also accept articles left on the bulletin board - the easiest way to to do this is to prepare your article in a word processor and save it normally. You then send a short e-mail to me and attach your file to it when you are on-line. It's actually easier to do than to describe because the whole thing is menu driven.

Finally, we pay for published articles at the rate of £5 per printed page (although all payments are at the Editor's discretion).

Advertising in the Magazine

Full and half page advertisements can be placed in the magazine and details can be obtained from the Advertising Manager. We also take classified ads and members may place free ads for surplus equipment in MicroMart.

Rates

Back Cover £60 Inside Cover £50 Full Page £30 Half Page £20

These rates assume black-on-white, camera ready copy. Please avoid dot-matrix output. Typesetting is charged at cost and is additional to the above rates. Please make cheques payable to *RM User Group*

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Membership Form

Please use capitals

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Job title (if appropriate) .....

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StopIt

The Print Job Management system for RM Net LM 2

Do you get tired of watching pages printed from the laser at your budget's expense? Those days can now be over - **StopIt** prevents users from printing out unless they have sufficient credit in their printing account for each page they want to print.

Technical Information

- Works with LANSpool printers and those directly connected to servers.
- Works with Postscript and HP compatible (PCL / HPGL) printers.
- Requires a dedicated networked station to run on (PC186 upwards). The administration module may be run on any Windows 3.1 station.
- Handles in excess of 6000 users (8000 if the scan station is a PC186).

Price: Secondary Schools - £349.00 Other institutions* - £899.00

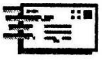
* Use Secondary School pricing if you have less than 1000 students on roll.

Prices are per LAN or Domain - discount available for more than one copy

Utilities for RM LAN Manager 1 + 2

NetSpace Plus

Monitors the disk space taken by each user's files. When the allotted space is reached, the user is asked (or made) to delete or move files. All the user's files are listed in one go from which a selection can be made. Files can be listed according to which program created them. It can also be used as a desktop application for copying and deleting files from the network and disk. **Windows 3.0 and 3.1 only. £50 (upg. £20).**



Sysmess

Allows the Network Administrator to send messages to users, groups, stations or everyone on the Network. Messages are displayed at logon, or immediately to logged-on users. *Users cannot send messages - a distinct advantage!*
Windows 3.0 (not PC186) and 3.1 only. £30.

Price of each utility includes a site license. All prices include p&p, but exclude VAT at the current rate.

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